



MEMORANDUM

To: *Chairman and Members of the
West Orange Planning Board*

From: *John J. Hess, PE, PP, CME
Planning Board Engineer*

Date: *September 27, 2022*

Re: *Application No. PB-22-08
William Cummings
Preliminary & Final Major Subdivision
with "C" Variances - Review #1
2 & 10 Ridge Road
Block 80.03, Lots 10 & 21
Our File: VWRP0080.01*

CC: *Paul Grygiel, AICP, PP - Township Planning Director
Leonard Lepore, PE - Township Engineer
Diana McGovern, Esq. - Planning Board Attorney
William Cummings - Applicant
Lisa A. John-Basta, Esq. - Applicant's Attorney
Robert Freud, PE - Applicant's Engineer*

Our office has received for review the following documents which were submitted in support of the above referenced application for Minor Subdivision approval with "C" Variance:

- A set of Preliminary and Final Subdivision plans (12 sheets) prepared by Robert P. Freud, PE with Dynamic Engineering of Lake Como, New Jersey dated July 27, 2022.
- A print of an ALTA/NSPS Land Title Survey (1 sheet) prepared by James A. Conway, Jr., PLS with Dynamic Survey, LLC of Lake Como, New Jersey dated May 11, 2022.
- A Stormwater Management, Groundwater Recharge and Water Quality Analysis report prepared by Robert P. Freud, PE, PP dated August 22. Included with the report is a set of Drainage Area Maps (2 sheets) dated July 27, 2022.
- A Report of Preliminary Geotechnical and Stormwater Basin Area Investigation prepared by Patrick Granitzki, PE and Francis Van Cleve, PE with Dynamic Earth of Chester, New Jersey dated June 8, 2022.
- A Traffic Impact and Parking Assessment prepared by Justin Taylor, PE, PTOE, LEED AP and Nick Verderese, PE, PTOE with Dynamic Traffic of Lake Como, New Jersey dated August 5, 2022.
- An Environmental Impact Statement prepared by Robert P. Freud, PE, PP dated August 2022.



Chairman and Members of the West Orange Township Planning Board
Re: William Cummings (PB-22-08)
Block 80.03, Lots 10 & 21
2 & 10 Ridge Road
Preliminary & Final Major Subdivision with "C" Variances - Review #1

September 27, 2022
Our File No. VWRP0080.01
Page 2

- A Planning Report prepared by Robert P. Freud, PE, PP dated August 8, 2022.
- A completed Application Form.
- A completed Application for Tree Removal and Replacement dated August 15, 2022.
- A completed Site Plan/Subdivision Checklist.
- A Preliminary List of Variances & Waivers dated August 2022.
- A Preliminary List of Required Regulatory Approvals dated August 2022.
- A Buffer Report which lists the owners of property within 200 Feet of lots 10 & 21, block 80.03 from the Office of the Tax Collector dated August 3, 2022..
- A copy of a Verification of Taxes & Sewer Charges Paid for Block 80.03, Lot 10 dated August 17, 2022.
- A copy of a Verification of Taxes & Sewer Charges Paid for Block 80.03, Lot 21 dated August 17, 2022.

We have reviewed the information submitted in support of this application and offer the following comments:

A. PROJECT DESCRIPTION

The property in question is an irregularly shaped tract which is located on the southeast corner of the intersection of Ridge Road and Mount Pleasant Avenue. It is located in the R-1 Residential District and has an area of 552,878 sf or approximately 12.69 acres. The property is currently vacant with the exception of remnants of prior development such as a brick path, rock walls and drainage improvements. We note that Ridge Road is a 30 ft wide private drive. In addition, areas of steep slope, including a rock cliff face, exist along portions of the site.

The Applicant is seeking Preliminary & Final Major Subdivision approval to subdivide the property into four (4) new lots. The new lots will have areas which vary from 2.28 acres to 3.89 acres. The proposed homes will be located on the westerly side of the property and will front on Ridge Road. In addition, a bioretention basin is proposed on each lot to mitigate the stormwater impacts from the development of the lot.

B. WAIVERS AND/OR EXCEPTIONS FROM THE RESIDENTIAL SITE IMPROVEMENT STANDARDS (RSIS)

This application is subject to the requirements of the Residential Site Improvement Standards (RSIS) adopted as N.J.A.C 5:21-1, et seq.

1. The Applicant has not requested any *de minimis* exceptions from the RSIS.



Chairman and Members of the West Orange Township Planning Board
Re: William Cummings (PB-22-08)
Block 80.03, Lots 10 & 21
2 & 10 Ridge Road
Preliminary & Final Major Subdivision with "C" Variances - Review #1

September 27, 2022
Our File No. VWRP0080.01
Page 3

2. The Applicant has not requested any waivers from the RSIS.

C. DESIGN COMMENTS

1. Based on our review, we find that the following items from the Township's Site Plan/Subdivision Checklist and Land Use Regulations must be addressed:
 - a) Item #20 – Copy and/or delineation of any existing or proposed deed restrictions or covenants.
 - b) Item #21 – Any existing or proposed easement or land reserved for or dedicated to public use.
 - c) As required by §25-27.5 of the Land Use Regulations, the Applicant must submit a qualified tree expert's report which addresses the requirements in §25-27.7.
 - d) As required by §25-51.5.r of the Land Use Regulations, the Applicant shall submit a proposed planting plan and planting schedule to the Board.
 - e) As required by §25-51.16 of the Land Use Regulations, the Applicant shall complete a Sustainability Checklist form as a completeness item.
2. The Applicant has requested the following waivers:
 - a) Item # 13 – Metes and bounds description showing dimensions, bearings, curve data, length of tangents, radii, arcs, chords and central angles for all centerlines and right-of-way, and centerline curves on streets.
 - b) Item #43 – New block and lot numbers confirmed with local assessor or municipal designee.
 - c) Item #44 – Lighting plan & details.
 - d) Item #52 – Plans and legal documents for compliance with West Orange COAH Ordinances.
3. The Applicant has not submitted a Final Plat prepared by a New Jersey Licensed Land Surveyor which shows the proposed layout of the lots and complies with the requirements of the Map Filing Law. Therefore, our office reserves comment until such time that a Final Plat has been submitted by the Applicant.
4. It shows on the plans that there are areas of steep slopes, including a rock cliff face, along portions of the site. Ordinance No. 2678-22 of the Land Use Regulations establishes controls which regulate soil disturbance and vegetation removal in steep slope areas. Therefore, the Applicant must submit the information set forth in §25-28.7 of the Ordinance.



Chairman and Members of the West Orange Township Planning Board
Re: William Cummings (PB-22-08)
Block 80.03, Lots 10 & 21
2 & 10 Ridge Road
Preliminary & Final Major Subdivision with "C" Variances - Review #1

September 27, 2022
Our File No. VWRP0080.01
Page 4

5. It states on the plans that Ridge Road is a 30 ft wide private drive. Therefore, the Applicant should address the Board regarding the ownership of Ridge Road. In addition, the Applicant must demonstrate that they have the right to use Ridge Road to access the proposed subdivision.
6. It shows on sheet 4 that the existing improvements on the property in question will be removed to a depth of approximately 220 ft from Ridge Road. This appears to be necessary to accommodate the proposed grading shown on sheet 6 which shows that up to 7 ft of fill will be placed at the site. However, it states in the first paragraph on page 2 of the Planning Report that *"Limited tree clearing will occur to accommodate the dwellings and their associated driveways while providing minimal grading to ensure proper drainage without the risk of erosion potential"*. Therefore, the Applicant must clarify if any of the existing trees within 220 ft from Ridge Road will be saved.
7. As required by §25-27.8.b, sheet 6 must be revised to state that no trees may be removed until after installation by the Applicant of the stormwater runoff controls and Soil Erosion measures that are required by the Ordinance.
8. As required by §25-27.8.g, to the greatest extent possible, for each tree removed having a DBH of four inches to no more than six inches the Applicant shall plant a major or minor tree. In addition, to the greatest extent possible, for each tree removed having a DBH of more than six inches the Applicant shall plant a major tree. The Applicant should address the Board regarding their plans to comply with this requirement.
9. Sheet 12 includes a Belgian Block Curb Detail. Therefore, sheet 5 must be revised to show the location(s) of the Belgian Block Curb. In addition, sheet 6 must be revised to show the proposed top of curb and gutter elevations at 50 ft intervals.
10. Sheet 12 includes a Paving Detail. The plans must be revised to clarify if the Applicant proposes to repave Ridge Road or if trench repair only is proposed. If Ridge Road is to be repaved, then the limits of the repaving must be shown on sheet 5.
11. It shows on sheet 6 that 5' curb cuts are proposed where the new lot lines intersect Ridge Road. The purpose of the curb cuts must be clarified.
12. The contours shown on sheet 6 within Mount Pleasant Avenue must be labeled.
13. It shows on sheet 6 that a sanitary sewer extension is proposed. The sewer extension will connect to an existing manhole on the northerly side of Mount Pleasant Avenue approximately 125 ft east of Ridge Road. The plans must be revised to show the pipe lengths, type of pipe, pipe slope and invert elevations.
14. Since a new sewer main will be installed in Mount Pleasant Avenue, the plans must be revised to include a County road pavement restoration detail.



Chairman and Members of the West Orange Township Planning Board
Re: William Cummings (PB-22-08)
Block 80.03, Lots 10 & 21
2 & 10 Ridge Road
Preliminary & Final Major Subdivision with "C" Variances - Review #1

September 27, 2022
Our File No. VWRP0080.01
Page 5

15. The proposed project will result in the disturbance of more than 1 acre of land. As a result, the project is classified as a Major Development which requires that the project be designed to meet the stormwater runoff quality, quantity and groundwater recharge standards using green infrastructure. We note that the property in question is located in an Urban Redevelopment Area. As a result, the groundwater recharge standards do not apply.
16. The Stormwater Management, Groundwater Recharge and Water Quality Analysis report shows that the stormwater runoff from the site was calculated using the HydroCAD software which uses the NRCS method. The report shows that the calculations used a minimum time of concentration of 10 minutes. Whereas the NRCS method specifies the use of a minimum time of concentration of 6 minutes (0.1 hrs). Therefore, the calculations must be revised accordingly.
17. The Applicant proposes to install a bioretention basin on each lot to mitigate the stormwater impacts from the proposed development. The bioretention basins are designed with underdrains. The runoff entering the bioretention basins will infiltrate through the soil bed to the underdrain system and will be discharged at a controlled rate through an outlet control structure. It shows on sheet 7 that the discharge from each basin will be piped towards the rear of the site. The flow from the basins on new lots 1, & 2 will discharge to an existing channel which outlets through a 15" x 15" culvert where it joins with the discharge from the basin on new lot 3. The combined flow from the existing channel plus the discharges from the basins on lots 1, 2 & 3 will then overland flow towards a steep slope on the easterly side of the property where it will discharge towards Mount Pleasant Avenue. The Applicant must demonstrate that this flow will not have any deleterious effects on the steep slope area.
18. It shows on sheet 7 that the 4" underdrain pipes in the bioretention basins will be connected to the 15" HDPE outlet pipe from each basin. In addition, the Bioretention Basin with Underdrain Details on sheet 12 show that a 6" PVC pipe outlet control is proposed. The plans should be revised to show how the connections will be made between the 4" underdrain pipe, the 6" outlet control pipe and the 15" HDPE pipe.
19. It shows in the Stormwater Management, Groundwater Recharge and Water Quality Analysis report that the discharges from Basin A and Basin B will be controlled by a 6" horizontal orifice/grate while the discharges from Basin C and Basin D will be controlled by an 8" horizontal orifice/grate. However, it Bioretention Basin with Underdrain Details on sheet 12 show that a 6" PVC pipe outlet control is proposed in each basin. These discrepancies must be resolved.
20. The discharge from the basin on lot 4 will discharge to the northeast towards a rock retaining wall adjacent to Mount Pleasant Avenue. The Applicant must demonstrate that this flow will not have any deleterious effects on the slope or the rock retaining wall.



Chairman and Members of the West Orange Township Planning Board

Re: William Cummings (PB-22-08)

Block 80.03, Lots 10 & 21

2 & 10 Ridge Road

Preliminary & Final Major Subdivision with "C" Variances - Review #1

September 27, 2022

Our File No. VWRP0080.01

Page 6

21. The Existing Drainage Area Map in the Stormwater Management, Groundwater Recharge and Water Quality Analysis report does not agree with the Existing Hydrology Routing Diagram. The routing diagram shows two (2) subareas which are not shown on the map. In addition, the map does not address the flow from the northerly portion of the site which discharges at a separate location from the southerly portion of the site.
22. The plans should include profiles of the proposed storm sewer pipes.
23. The Stormwater Collection System Calculations table in the Stormwater Management, Groundwater Recharge and Water Quality Analysis report must be revised to add the discharge pipe from Basin D.
24. As stipulated in §25-29.10 of the Land Use Regulations, the design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development. In addition, the maintenance plan and any future revisions shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken. Prior to recording, the form of the deed must be approved by the Planning Board Attorney and our office.
25. The plans should include a profile of the proposed sanitary sewer main.
26. As required by §32-10.4 of the Land Subdivision Regulations, shade trees must be provided along the street line.
27. The Applicant should address the Board regarding their plans to install sidewalks along the frontage of the new lots to provide pedestrian access to Mount Pleasant Avenue.
28. The Belgian Block Curb detail on sheet 12 must be revised to show that Class 'B' concrete is required.
29. The Bioretention Basin with Underdrain Details show that each basin will have a 6" thick bottom sand layer whereas the Bioretention System Detail shows that the basins will have an 18" thick soil planting bed over a 6" thick sand layer over a gravel layer. This discrepancy must be resolved.
30. The Bioretention System Detail must be revised to show the thickness of the gravel layer and to include specifications for the gravel layer and the soil planting bed. In addition, the proposed plantings within the soil planting bed must be specified.

The Applicant is hereby advised that any revised plans or other documents submitted to the Board should be accompanied by a cover letter which addresses each of the comments in this review letter and also details any other changes that have been made to the plans as these may not be readily apparent.